



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/599,920	06/28/2007	Patrick James McNaughton	18333.1.23.1.1	6593

22859 7590 08/12/2009  
INTELLECTUAL PROPERTY GROUP  
FREDRIKSON & BYRON, P.A.  
200 SOUTH SIXTH STREET, SUITE 4000  
MINNEAPOLIS, MN 55402

EXAMINER
----------

HOGAN, JAMES SEAN

ART UNIT	PAPER NUMBER
----------	--------------

3752

MAIL DATE	DELIVERY MODE
-----------	---------------

08/12/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/599,920	<b>Applicant(s)</b> MCNAUGHTON, PATRICK JAMES	
	<b>Examiner</b> JAMES S. HOGAN	<b>Art Unit</b> 3752	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 June 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 11-14, 17-28 and 33-48 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 17-28 is/are allowed.
- 6) ☒ Claim(s) 11-14, 33, 34 and 44 is/are rejected.
- 7) ☒ Claim(s) 35-43, 45-48 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments with respect to all remaining have been considered but are moot in view of the new ground(s) of rejection, as discussed with Applicant's representative in various phone calls between July 30, 2009 and August 7, 2009. As new art is being introduced against the newly amended claims, prosecution shall remain under Non-Final status.

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 3,888,412 to Lindo in view of U.S. Patent No. 6,349,926 to Taylor et al

3. As per claims 11-13, Lindo discloses a wiper fluid heater apparatus having a heat exchanger (30) having a wiper fluid inlet (14) and outlet (18) and having a coolant passage (33) traversing through the heat exchanger, the coolant passage with a coolant passage plate (see Figure 6) coupled to an engine's coolant system, a chamber (10) for containing washer fluid in contact with a wiper fluid plate (51), pumping (12) means for transferring fluid from the chamber to a nozzle. Lindo does not teach its coolant passage having fins. Taylor et al teaches a pipe-in-pipe assembly perfectly capable of performing heat exchanging tasks, where an inside passage (12) could perform as a

Art Unit: 3752

coolant passage, the inside passage features fins (18) that touch the inside wall of an outer passages (14). Therefore, it would have been obvious to one having ordinary skill in the art to have provided the device of Lindo with a heat exchanger with a finned inside passage as suggested by Taylor et al. Doing so would provide a compact system and because (a) the Lindo reference and the Taylor et al reference are *known work in one of field of endeavor*, (b) such modification is merely the use of known technique to improve a similar device by Applicant and (c) such modification, i.e. choosing from a finite number of predictable solutions, is not of innovation but of ordinary skill and common sense. *KSR, International Co. v. Teleflex Inc., 550 U.S. (2007)*.

4. As per claim 14, the fin assembly of Taylor et al, if used to modify the system of Lindo would act as a plausible thermal barrier between the inlet channel and the outlet channel of Lindo, as it would have been obvious to one having ordinary skill in the art at the time the invention was made to have used the heat exchanger of Taylor et al in the system of Lindo et al.

5. Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,364,010 to Richman.

6. As per claim 33, Richman et al teaches a heat exchanger (200) having a wiper fluid inlet (A) to allow wiper fluid to enter the heat exchanger and a wiper fluid outlet (b) to allow the wiper fluid to exit the heat exchanger, the heat exchanger having a bypass passage (see Figure 2), associated with thermostatic valve (102); and a coolant passage traversing through the heat exchanger having a coolant inlet (C) and a coolant

Art Unit: 3752

outlet (D), the coolant inlet and coolant outlet operably coupled to an engine's coolant system (100, 104) to allow passage of engine coolant through the heat exchanger.

Richman et al further teaches a thermostatic valve (102) which could be interpreted to one having ordinary skill in the art as a thermal actuator which routes engine coolant flow if it becomes too hot.

7. Claim 34 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,364,010 to Richman in view of U.S. Patent No. 6,349,976 to Taylor et al.

8. The rejection of claim 33 above serves as the basis for the following. As per claim 34, Richmond does not teach its exchanger having chambers. Taylor et al teaches a pipe-in-pipe assembly perfectly capable of performing heat exchanging tasks, where an inside chamber (12) could perform as a wiper fluid passage and an outside chamber (14) capable of being coupled to the coolant, where, as per claim 44, the first chamber is smaller than the second chamber. Therefore, it would have been obvious to one having ordinary skill in the art to have provided the device of Richman with a heat exchanger with a finned inside passage as suggested by Taylor et al. Doing so would provide chambered system and because (a) the Richman reference and the Taylor et al reference are *known work in one of field of endeavor*, (b) such modification is merely the use of known technique to improve a similar device by Applicant and (c) such modification, i.e. choosing from a finite number of predictable solutions, is not of innovation but of ordinary skill and common sense. *KSR, International Co. v. Teleflex Inc.*, 550 U.S. (2007).

***Allowable Subject Matter***

9. Claims 17-28 are allowed
10. Claims 35-43 and 45-48 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure is as follows:

U.S. Patent No. 7,044,210 to Usui

U.S. Patent No. 4,163,474 to MacDonald et al

U.S. Patent No. 3,877,514 to beck

U.S. Patent No. 2,929,408 to Weatherwax et al

U.S. Patent No. 5,375,654 to Houghland et al

U.S. Patent No. 6,283,159 to Tada

U.S. Patent No. 3,200,848 to Takagi

U.S. Patent No. 4,893,670 to Joshi et al

U.S. Patent No. 6,116,290 to Ohrn et al

U.S. Patent No. 2,756,032 to Dowell

U.S. Patent No. 5,803,600 to Schubert et al

U.S. Patent No. 3,359,616 to Butt

Art Unit: 3752

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMES S. HOGAN whose telephone number is (571)272-4902. The examiner can normally be reached on Mon-Fri, 6:00a-3:00p EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Len Tran can be reached on (571)272-1184. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. S. H./  
Examiner, Art Unit 3752

/Len Tran/  
Supervisory Patent Examiner, Art Unit 3752